

Abstract

In vitro cultivation method for producing human melanocytes which are capable of melanin and/or L-dopa synthesis, and to various uses of said melanocyte(s). In one preferred aspect, said melanocyte(s) are used in an autologous implantation method in a patient suffering from a neurodegenerative disease, e.g. Parkinson's disease. In another aspect, a screening method is provided utilizing melanocyte(s) from said cultures, wherein substances are screened for which may in any way effect said melanocyte(s). Said substances may e.g., be neurotoxic, neuroprotective, or particularly lethal to melanocytes obtained from a patient suffering from Parkinson's disease. The invention also relates to other uses of said melanocytes, all of which are disclosed herein.